

CLAIMS

1. A method of setting parameters of a real time packet-based connection over a communication network, comprising:
5 identifying, by a particular network element, a real-time packet based connection;
selecting, by the particular network element, a value for at least one end-point parameter of the identified connection; and
selecting, by the particular network element, a value for at least one network parameter of the identified connection.
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2. A method according to claim 1, wherein the selecting of the values of the end-point parameter and the network parameter is performed during setup of the connection.
3. A method according to claim 1, wherein the at least one end-point parameter comprises
15 a negotiated parameter.
4. A method according to claim 1, wherein the at least one end-point parameter comprises at least one non-negotiated parameter.
- 20 5. A method according to claim 1, wherein the at least one end-point parameter comprises a jitter buffer size.
6. A method according to claim 1, wherein the at least one end-point parameter comprises a frame size of transmitted packets on the connection.
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7. A method according to claim 1, wherein the at least one end-point parameter comprises a codec type.
8. A method according to any claim 1, wherein the at least one network parameter
30 comprises a global parameter.
9. A method according to claim 1, wherein the at least one network parameter comprises a route to be traversed by the packets of the connection.

10. A method according to claim 1, wherein the at least one network parameter comprises a header compression method to be applied to the packets of the connection.
- 5 11. A method according to claim 1, wherein the at least one network parameter comprises an MTU value of at least one routing unit of the network.
12. A method according to claim 1, comprising receiving by the particular network element a value of a quality of service QoS attribute of the network, and wherein the selecting of the
10 network parameter and the end-point parameter is performed responsive to the value of the QoS attribute.
13. A method according to claim 12, wherein the value of the QoS attribute is determined before the connection is established.
- 15 14. A method according to claim 12, wherein the QoS attribute comprises a jitter value of links of the network.
15. A method according to claim 12, wherein the QoS attribute comprises a delay value of
20 links of the network.
16. A method according to claim 12, wherein the QoS attribute comprises an available bandwidth value of links of the network.
- 25 17. A method according to claim 12, wherein the QoS attribute comprises a packet loss value of links of the network.
18. A method according to claim 1, wherein selecting the value for the at least one end-point parameter comprises selecting the value of the end-point parameter responsive to the
30 selected value of the network parameter.
19. A method according to claim 1, wherein selecting the value of the network parameter is performed responsive to the selected value of the end-point parameter.

20. A method according to claim 1, wherein selecting the value for the at least one end-point parameter comprises selecting a codec responsive to a delay of a selected route for the connection, such that the total delay of the route in the codec is smaller than a predetermined value.
21. A method according to claim 1, wherein selecting of the network parameter value is performed responsive to a type of the connection.
22. A method according to claim 1, comprising transmitting the value of the at least one end-point parameter to an end-point of the connection and transmitting the value of the network parameter to at least one routing unit for implementation thereby.
23. A method according to claim 1, wherein the particular network element is not an end-point of the connection.
24. A method according to claim 1, wherein the particular network element selects parameter values for a plurality of different connections substantially concurrently.
25. A method of setting parameters of a real time packet-based connection over a communication network, comprising:
- collecting quality of service attribute values of the network, by one or more network elements;
 - selecting a value for at least one end-point parameter of the connection, responsive to the collected attribute values; and
 - selecting a value for at least one network parameter of the connection, responsive to the collected attribute values.
26. A method according to claim 25, wherein the values of the at least one end-point parameter and the at least one network parameter are selected before either of the parameter values is implemented.

27. A method of setting parameters of a real time packet-based connection over a communication network, comprising:

determining a value for at least one end-point parameter of the connection; and

selecting a value for at least one network parameter of the connection, responsive to the
5 determined value of the at least one end-point parameter.

28. A method according to claim 27, wherein the at least one network parameter is selected before the value of the end-point parameter is implemented.

10 29. A method according to claim 27, wherein determining the value of the at least one end-point parameter comprises receiving the value from a unit that determined the value.

30. A method according to claim 27, wherein determining the value of the at least one end-point parameter comprises selecting the value of the at least one end-point parameter.

15 31. A method of setting parameters of a real time packet-based connection over a communication network, comprising:

determining a value for at least one network parameter of the connection; and

selecting, before implementing the selected value of the network parameter, a value for
20 at least one end-point parameter of the connection, responsive to the determined value of the at least one network parameter.

32. A method according to claim 31, wherein the at least one network parameter comprises a route for the connection.

25 33. A method according to claim 31, wherein determining the value of the at least one network parameter comprises selecting the value.

34. Apparatus for determining parameter values of a real time packet-based connection
30 over a communication network, comprising:

an input interface for receiving information regarding real time connections between end-point units; and

a processor adapted to select for at least one connection a value for at least one end-point parameter and for at least one network parameter.

35. Apparatus according to claim 34, wherein the input interface is adapted to receive the
5 information by receiving control packets of the connections.

36. Apparatus according to claim 34, wherein the processor additionally identifies real-time packet based connections.

10 37. A method of setting parameters of a real time packet-based connection over a communication network, comprising:

collecting quality of service attribute values of the network, by a first network element;

selecting a value for at least one non-negotiated end-point parameter of a connection of
which a second network element is an end-point, responsive to the collected attribute values;

15 and

implementing the selected parameter value by the second network element.

38. A method according to claim 37, wherein the non-negotiated end-point parameter
comprises a jitter buffer size.

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39. A method according to claim 37, wherein selecting the value for the parameter is
performed by the first network element.

40. A method according to claim 37, wherein selecting the value for the parameter is
25 performed by the second network element.

41. A method of setting parameters of a plurality of real time packet-based connections
between end-point elements, over a communication network, comprising:

30 collecting quality of service attribute values of the network, by a particular network
element;

selecting, by the particular network element, values for at least one end-point parameter
of a plurality of connections over the network; and

implementing the selected parameter values in respective end-points of the connections.

42. A method according to claim 41, wherein the value of the parameter for at least one
5 connection is selected responsive to the value of the parameter selected for at least one other connection.

43. A method of setting parameters of a real time packet-based connection over a communication network, comprising:
10 receiving, by an intermediary network element, a signaling packet transmitted between end-points of a real time packet based connection;
determining a value for at least one end-point parameter of the connection;
changing, by the intermediary network element, the value of at least one field of the received signaling packet, responsive to the determined value of the parameter; and
15 forwarding, from the intermediary network element, the packet with the changed value.

44. A method according to claim 43, wherein determining the value comprises determining a codec to be used.

20 45. A method according to claim 44, wherein changing the value of the field comprises changing a field stating codec types supported by an end-point to include only the determined codec.